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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,382	03/19/2004	Gary Lee Sturgill II	SS3375USNA	7243

23906 7590 11/15/2006

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WILMINGTON, DE 19805

EXAMINER

BEFUMO, JENNA LEIGH

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/804,382

Applicant(s)

STURGILL, GARY LEE

Examiner

Jenna-Leigh Befumo

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 13-37 and 42-45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 38-41 and 46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 5, 2006 has been entered.

### ***Response to Amendment***

2. The Amendment submitted on October 5, 2006, has been entered. Claims 1 and 38 have been amended. Therefore, the pending claims are 1 – 46. Claims 13 – 37 and 42 – 45 are withdrawn from consideration as being drawn to a nonelected invention.

### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1 – 5, 7 – 9, 38 – 41 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Druecke et al. (6,139,675) in view of Rudisill et al. (5,885,909).

The claims are rejected for the reasons of record. Further, Druecke et al. discloses that the composite is heated to a temperature of between 33 and 40°C to cure the adhesive. Thus, it would have been obvious to one having ordinary skill in the art to choose an adhesive with a curing temperature below 33°C, and preferably lower than 30°C in the composite taught by Druecke et al. so that the adhesive will dry and cure during the heating process without requiring additional energy or heat to create a secure bond between the layers. Additionally, although

Art Unit: 1771

Druecke et al. does not explicitly teach the limitations curing temperature, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. water-based adhesive materials) and in the similar production steps (i.e. adding the adhesive to bond together composite layers) used to produce the composite material. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed curing temperature would obviously have been provided by the process disclosed by Druecke et al. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102. Thus, claims 1 – 5, 7 – 9, 38 – 41 and 46 are rejected.

5. Claims 1 – 5, 7 – 12, 38, 39, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Austin et al. (5,415,925) in view of Crenshaw et al. (4,588,457) and Strack et al. (5,681,645).

The features of Austin et al., Crenshaw et al., and Strack et al. have been set forth in the previous Office Action. The claims have been amended to include the limitation that the adhesive cures at about 15 to 30°C. While the prior art teaches that the adhesive is tacky at room temperature (which is between 20 and 23°C), Crenshaw et al. fails to teach the curing temperature of adhesive. However, adhesive become tacky when they are beginning to cure, at a temperature just below the curing temperature. Thus, the adhesive will have a curing temperature slightly above room temperature, which includes 23 to 30°C. Further, while Crenshaw et al. does not explicitly teach the limitations of curing temperature, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. water-based adhesive) and in the similar production steps (i.e.

Art Unit: 1771

bonding together composite layers) used to produce the composite material. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. Therefore, claims 1 – 5, 7 – 12, 38, 39, and 46 are rejected.

6. Claim 6 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Druecke et al. and Rudisill et al. as applied to claim 1 above, and further in view of Pruett et al. (5,010,165) for the reasons of record.

7. Claim 6 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Austin et al., Strack et al., and Crenshaw et al. as applied to claim 1 above, and further in view of Pruett et al. for the reasons of record.

#### ***Response to Arguments***

8. Applicant's arguments filed October 5, 2006 have been fully considered but they are not persuasive. The applicant argues that the limitation that the adhesive cures at about 15 to 30°C is sufficient to overcome the prior art. With regards to the rejection based on Druecke et al., the applicant argues that the examples show that the adhesive cures above 30°C because the laminate is heated to temperatures between 33 and 40°C during the drying process (response, page 9).

However, the temperature to which the composite is heated does not directly relate to the curing temperature. This information only discloses that the adhesive cures at some temperature below the temperature to which the composite is heated, but it does not specifically teach the curing temperature of the adhesive. The curing temperature for the adhesive is at a temperature below 33°, for the adhesive to cure in the examples. The applicant has not provided sufficient evidence that the adhesive taught by the applicant would not cure within the claimed range because the

Art Unit: 1771

temperature the composite is heated to is not necessarily the cure temperature of the adhesive disclosed by Druecke et al.. Thus, the rejection is maintained.

Additionally, the applicant argues that the rejection based on Austin et al. and Crenshaw et al. does not teach the claimed curing temperature because the reference teaches that the adhesive is tacky at room temperature (response, pages 9 – 10). First, it is noted that room temperature is considered to be about 20 to 23°C. Thus, the applicant's claimed range is above room temperature. Further, an adhesive becomes tacky when it is beginning to set or cure. This occurs slightly below the curing temperature. Thus, the adhesives which are tacky at room temperature are beginning to set and would cure slightly above room temperature, between 23°C and 30°C. Therefore, the water based adhesives taught by Crenshaw et al. have not been shown to cure outside of the claimed range because the claimed range is not limited to room temperature or below. Further, Crenshaw et al. uses similar materials as the claimed invention, i.e., water-based adhesives, and the curing temperature is presumed to be inherent to Crenshaw et al., until the applicant proves otherwise. The applicant has not provided any evidence that the tacky adhesives would not cure below 30°C. The arguments of counsel cannot take the place of evidence. *In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984). Thus, the rejections are maintained.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (571) 272-1472. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

Art Unit: 1771

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jlb  
November 13, 2006

A handwritten signature in black ink, appearing to read "Jenna Befumo".

JENNA BEFUMO  
PRIMARY EXAMINER